IN THE CLAIMS

1. (Previously Presented) A mixer/flow conditioner comprising:

at least three successive partitions defining at least two gaps therebetween; and

means within each gap defining a plurality of passages, at least one passage in each gap having an orientation with a tangential component having a magnitude greater than zero so as to impart a tangential velocity component to a packet of fluid flowing therethrough;

wherein the tangential component magnitudes cause the packets of fluid exiting the at least one passages to interact to create a final flow stream having a swirl number less than about 0.2

2. (Original) The mixer/flow conditioner of claim 1 wherein the means within each gap for defining a plurality of passages is a corrugated strip.

3. (Original) The mixer/flow conditioner of claim 1 wherein the swirl number is less than about 0.03.

4. (Previously Presented) The mixer/flow conditioner of claim 1 wherein the swirl number is less than about 0.02.

5. (Original) The mixer/flow conditioner of claim 1 wherein the plurality of passages each have an exit defining a hydraulic diameter and a length and the passages within an individual gap have an equal length to hydraulic diameter ratio.

6. (Currently Amended) [[The]] A mixer/flow conditioner comprising:

~~at least three successive partitions defining at least two gaps therebetween;~~

means within each gap defining a plurality of passages, ~~of claim 5~~ wherein the passages in adjacent gaps have orientations that adopt different directional rotations ~~are opposite each other whereby the passages in one gap impart a clockwise swirl and the passages in the other gap impart a counter-clockwise swirl.~~

7. (Original) The mixer/flow conditioner of claim 5 wherein the orientation of the passages within an individual gap are identical.

8. (Previously Presented) The mixer/flow conditioner of claim 6 wherein the passages in adjacent gaps have orientations that are opposite each other whereby the passages in one gap impart a clockwise swirl and the passages in the other gap impart a counter-clockwise swirl.

9. (Previously Presented) The mixer/flow conditioner of claim 5 wherein each passage has a tangential orientation greater than zero.

10. (Original) The mixer/flow conditioner of claim 1 wherein the partitions are approximately concentric.

11. (Original) The mixer/flow conditioner of claim 10 wherein there are at least 6 gaps.

12. (Original) The mixer/flow conditioner of claim 10 wherein adjacent gaps act as pairs.

13. (Previously Presented) The mixer/flow conditioner of claim 1 wherein the orientation of the passages is less than about 80 degrees relative to a central axis.

14. (Original) The mixer/flow conditioner of claim 13 wherein the orientation of the passages in two adjacent gaps defines an included angle between 15 and 60 degrees.

15. (Previously Presented) The mixer/flow conditioner of claim 13 wherein each of the passages has a length and an exit defining a hydraulic diameter, and the passages have a length to hydraulic diameter ratio less than about 10.

16. (Original) The mixer/flow conditioner of claim 15 wherein the length to hydraulic diameter ratio is greater than about 0.5.

17. (Cancelled)

18. (Previously Presented) A mixer/flow conditioner for conditioning comprising:

at least two partitions defining a gap;

at least two corrugated strips positioned in the gap, each corrugated strip defining a plurality of passages, at least one of the passages on each corrugated strip having an orientation with a tangential component having a magnitude greater than zero, said orientations on each corrugated strip adopting different directional rotations; and

wherein the at least two passages cooperate to cause packets of fluid passing therethrough upon exiting to interact to produce a swirl number less than 0.2.

19. (Original) The mixer/flow conditioner of claim 18 wherein the swirl number is less than 0.03.

20. (Original) The mixer flow conditioner of claim 19 wherein the swirl number is less than 0.02.

21. (Previously Presented) The mixer/flow conditioner of claim 18 wherein each passage has an exit defining a hydraulic diameter and a length and the passages within an individual gap have an equal length to hydraulic diameter ratio.

22. (Previously Presented) A mixer/flow conditioner for conditioning comprising:

at least two partitions defining a gap;

at least two corrugated strips positioned in the gap, each strip defining a plurality of passages,

wherein the passages formed by adjacent corrugated strips have orientations that are opposite each other.

23. (Previously Presented) The mixer/flow conditioner of claim 22 wherein the passages formed by each corrugated strip are concentric.

24. (Previously Presented) The mixer/flow conditioner of claim 23 wherein the passages act in pairs.

25. (Previously Presented) The mixer/flow conditioner of claim 24 wherein the orientation of the passages formed by one corrugated strip are opposite the orientation of the passages of the other corrugated strip and the sum of the angular momenta of packets of fluid exiting the passages is equal to about zero.

26. (Original) The mixer/flow conditioner of claim 25 wherein there are at least 6 gaps.

27. (previously presented)The mixer/flow conditioner of claim 18 wherein the orientation associated with each corrugated strip is less than about 80 degrees relative to a central axis.

28. (Original) The mixer/flow conditioner of claim 27 wherein the orientation of two adjacent gaps defines an included angle between 15 and 60 degrees.

29. (Original) The mixer/flow conditioner of claim 27 wherein each passage has an exit defining a hydraulic diameter and a length, and the length to hydraulic diameter ratio is less than 10.

30. (Original) The mixer/flow conditioner of claim 29 wherein the length to diameter ratio is greater than 0.5.

31. (Original) The mixer/flow conditioner of claim 30 wherein the orientation of the passages within a gap are identical.

32. (Cancelled)